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# Cooperative Flax Trials in the Spring Flax Region-1986



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#### ACKNOWLEDGMENTS

Agronomists and plant pathologists in the United States and Canada who are interested in flax improvement have cooperated by growing the Regional Flax nurseries from which the data in this report have been compiled. A list of the cooperating agencies and personnel is given on page 3. The writers of this report wish to express their sincere appreciation to individuals who undertook to grow one or more of these nurseries during this past year.

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This publication is a joint report of cooperative investigations by the State agricultural experiment stations, Canadian Department of Agriculture, Canadian Province universities, and the U.S. Department of Agriculture that contains preliminary data, interpretation of which may be modified by additional experimentation.

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# COOPERATING AGENCIES, STATIONS, AND PERSONNEL

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## COOPERATIVE FLAX TRIALS IN THE SPRING FLAX REGION--1986

By Jerry F. Miller, James J. Hammond, and Thomas J. Gulya<sup>1</sup>

### REGIONAL VARIETAL TRIALS IN 1986

The Cooperative Regional Nursery in 1986 consisted of varieties grown in nurseries at 13 locations. The varieties included in the trials are listed in table 1, and the stations from which data were obtained are given in table 2.

This report covers agronomic, disease, and seed-quality data reported from the stations. The Cooperative Regional Nursery has been grown for 48 years, from 1939 to 1986, and data have been reported for a total of 1,244 trials. A total of 362 varieties or selections have been grown for 1 or more years.

All data are reported in the metric system. Several conversion factors are shown to aid in converting figures to the other system.

#### Conversion Factors

$0.777 \times \text{g/L} = \text{lb/bu}$

$0.892 \times \text{kg/ha} = \text{lb/acre}$

$0.01593 \times \text{kg/ha} = \text{bu/acre}$

$\text{NMR reading/wt of sample/constant} = \text{oil percent}$

#### LEAST SIGNIFICANT DIFFERENCE

Plot size and number of replications of the different tests vary, but most plots were near 5 m long with three replications. Least significant differences at the 5-percent point have been calculated for all stations. Average seed yields of the various tests, together with the least significant differences calculated both in kilograms and in percent of the mean, are shown in table 2.

Agronomic data from the nurseries by substations are shown in table 3. Varieties are listed in systematic order with a column indicating yield rank. Included with the experimental varieties were four check varieties (Bison, Linott, Culbert, and Dufferin). Additional varieties are included at a number of stations. In table 5, the comparative yield of all varieties at all stations is shown as percent of check.

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<sup>1</sup>Miller and Gulya are research geneticist and research plant pathologist, respectively, U.S. Department of Agriculture, Agricultural Research Service, and Hammond is a professor in the Department of Agronomy, all at the North Dakota State University, Fargo, ND 58105.



TABLE 1. VARIETIES OF FLAX GROWN IN COOPERATIVE REGIONAL NURSERIES  
IN 1986

VARIETY OR CROSS	C.I. NUMBER	SOURCE	YEAR ENTERED
BISON	389	ND	1927
LINOTT	2522	CAN	1967
CULBERT	2776	MINN	1972
DUFFERIN	2814	CAN	1975
N306 Z2236/CI2838	3101	ND	1984
FP796 DUFFERIN/2820	3107	CAN	1984
VIMY FP800 KUB/LINOTT	3108	CAN	1984
SDT8412 BFP/CULB	3131	SD	1985
N407 Z158/CULBERT 79	3133	ND	1985
N412 Z181/CULBERT 79	3135	ND	1985
N421 Z1067/CULBERT 79	3136	ND	1985
U404 CULB/BSN//CULB/BSN M3P3 3	3137	USDA-ND	1985
SD84104 N707/CI2777//N419	3243	SD	1986
SD84126 N707/CI2777//N419	3244	SD	1986
SD84164 N707/CI2777//N419	3245	SD	1986
N505 Z1153/DUFFERIN	3246	ND	1986
N509 Z2236/NORED	3247	ND	1986
N518 Z704/DUFFERIN	3248	ND	1986
N524 Z953/DUFFERIN	3249	ND	1986
M508 HQ3/HQ6 84-518	3250	MINN	1986
M519 HQ4/HQ5 84-629	3251	MINN	1986
FP792 DUFFERIN/MCGRE	3252	CAN	1986
FP846 STS	3253	CAN	1986

TABLE 2. AVERAGE YIELDS OF SEED, LEAST SIGNIFICANT DIFFERENCES AND  
PAGE NUMBERS OF DATA TABLES FROM COOPERATING STATIONS IN  
1986

STATION	AVG. YIELD KG/HA	LSD (.05) KG PERCENT	PAGE NO. OF TABLE
MINNESOTA			
LAMBERTON (EARLY)	1698	221 13	6
CROOKSTON (EARLY)	1731	665 38	6
SOUTH DAKOTA			
BROOKINGS (EARLY)	1859	436 23	6
WATERTOWN (EARLY)	2437	228 9	7
NORTH DAKOTA			
FARGO (EARLY)	1136	217 19	7
FARGO (LATE )	1191	387 32	7
MINOT (EARLY)	1302	216 17	8
CARRINGTON (EARLY)	1596	375 23	8
LANGDON (EARLY)	1210	308 25	8
MANITOBA			
MORDEN (EARLY)	1185	207 17	9
PORTAGE (EARLY)	1411	254 18	9
PORTAGE (LATE )	1969	317 16	9
WINNIPEG (EARLY)	2216	226 10	10
S*TOON (EARLY)	1918	293 15	10
NORTH DAKOTA			
WILLISTON (EARLY)	1375	244 18	10

MINNESOTA

TABLE 3. YIELD AND OTHER DATA FOR FLAX VARIETIES AND SELECTIONS GROWN IN REGIONAL TRIALS IN 1986 AT DIFFERENT LOCATIONS

LAMBERTON ,MINNESOTA						(EARLY)	SEEDED 5/ 7 HARVESTED 0.0				SQUARE METERS				
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L O D G	W I L T	P A S S M	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD		
		FIRST BLOOM	FULL BLOOM	MATURITY									RANK	KG PER HA	% CHECKS
389	24				68			5			38.0		22	1406	83
2522	17				60			5			38.0		12	1744	103
2776	15				62			4			39.0		13	1735	103
2814	12				68			6			39.0		4	1879	111
3101	3				67			7			39.0		2	1960	116
3107	3				61			6			39.0		14	1702	101
3108	3				67			7			39.0		21	1420	84
3131	2				65			4			39.0		1	2037	120
3133	2				63			5			39.0		3	1906	113
3135	2				65			5			38.0		9	1771	105
3136	2				72			4			38.0		11	1768	105
3137	2				65			3			37.0		7	1788	106
3243	1				62			4			40.0		6	1823	108
3244	1				55			6			41.0		19	1493	88
3245	1				59			4			40.0		20	1429	85
3246	1				67			4			38.0		17	1657	98
3247	1				69			4			38.0		18	1626	96
3248	1				61			6			40.0		15	1700	101
3249	1				65			6			39.0		10	1770	105
3250	1				61			3			43.0		8	1777	105
3251	1				78			4			43.0		23	1104	65
3252	1				58			5			39.0		5	1874	111
3253	1				61			4			39.0		16	1673	92
STATION AVERAGE 1698 KG PER HECTARE ; LSD(.05) = 221 KG/HA. ; F = 7.2295															

STATION AVERAGE 1698 KG PER HECTARE; LSD(.05) = 221 KG/HA. ; F = 7.2295

CROOKSTON, MINNESOTA (EARLY)						SEEDED 5/20 HARVESTED 0.0					SQUARE METERS				
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D G	W I T	W L T	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD KG PER HA	CHECKS	
		FIRST BLOOM	FULL BLOOM	MATURITY											
389	46				61						39.0		23	1512	93
2522	19				55						40.0		10	1733	107
2776	15				50						40.0		18	1648	102
2814	12				64						40.0		21	1585	98
3101	3				55						41.0		2	1887	117
3107	3				62						40.0		10	1733	107
3108	3				60						41.0		4	1878	116
3131	2				50						41.0		14	1691	104
3133	2				57						41.0		6	1816	112
3135	2				54						40.0		12	1702	105
3136	2				55						40.0		5	1827	113
3137	2				56						40.0		7	1787	110
3243	1				55						42.0		20	1628	101
3244	1				55						43.0		17	1682	104
3245	1				51						42.0		13	1693	105
3246	1				63						39.0		22	1543	95
3247	1				64						39.0		15	1686	104
3248	1				58						41.0		3	1885	116
3249	1				58						40.0		8	1762	109
3250	1				53						44.0		1	1949	120
3251	1				54						44.0		19	1647	102
3252	1				66						40.0		9	1742	108
3253	1				51						39.0		16	1684	104
STATION AVERAGE 1731 KG PER HECTARE; LSD(.05) = 665 KG/HA. ; F = 0.2393															

STATION AVERAGE 1731 KG PER HECTARE; LSD(.05) = 665 KG/HA. ; F = 0.2393

BROOKINGS ,SOUTH DAKOTA (EARLY)						SEEDED 4/22 HARVESTED 0.0					SQUARE METERS				
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D G	W I T	W L T	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD KG PER HA	% CHECKS	
		FIRST BLOOM	FULL BLOOM	MATURITY											
389	4				61						39.0		18	1720	97
2522	19				56						40.0		23	1543	87
2776	14				53						40.0		14	1756	99
2814	11				58						42.0		5	2078	117
3101	2				59						42.0		10	1874	106
3107	2				62						41.0		9	1886	106
3108	2				59						41.0		17	1748	99
3131	2				56						41.0		22	1679	95
3133	2				56						41.0		21	1688	95
3135	2				56						40.0		20	1694	95
3136	2				54						41.0		19	1715	97
3137	2				54						41.0		4	2093	118
3243	1				54						44.0		6	1980	112
3244	1				51						44.0		11	1864	105
3245	1				56						43.0		3	2096	118
3246	1				59						40.0		13	1764	99
3247	1				62						39.0		16	1753	99
3248	1				55						42.0		2	2116	119
3249	1				58						41.0		7	1920	108
3250	1				54						43.0		7	1920	108
3251	1				52						45.0		12	1843	104
3252	1				57						41.0		1	2262	127
3253	1				56						40.0		15	1754	99
STATION AVERAGE 1859 KG PER HECTARE; LSD(.05) = 436 KG/HA. ; F = 1.3221															

STATION AVERAGE 1859 KG PER HECTARE; LSD(.05) = 436 KG/HA. ; F = 1.3221



TABLE 3. YIELD AND OTHER DATA FOR FLAX VARIETIES AND SELECTIONS GROWN IN REGIONAL TRIALS IN 1986 AT DIFFERENT LOCATIONS--(CONTINUED)

WATERTOWN, SOUTH DAKOTA (EARLY)						SEEDED 4/29 HARVESTED 0.0				SQUARE METERS					
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D G	W I T	W I T	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD		% CHECKS
		FIRST BLOOM	FULL BLOOM	MATURITY									RANK	KG PER HA	
389	22				64						40.0		22	2175	90
2522	13				62						41.0		5	2522	104
2776	9				59						41.0		6	2508	104
2814	7				65						41.0		12	2462	102
3101	3				66						42.0		14	2448	101
3107	3				63						41.0		19	2340	97
3108	3				65						40.0		23	2098	87
3131	2				62						42.0		4	2564	106
3133	2				58						42.0		10	2477	102
3135	2				64						41.0		17	2399	99
3136	2				63						42.0		3	2574	107
3137	2				58						42.0		15	2438	101
3243	1				62						43.0		2	2577	107
3244	1				57						43.0		6	2508	104
3245	1				62						43.0		16	2416	100
3246	1				65						39.0		20	2336	97
3247	1				70						39.0		18	2362	98
3248	1				61						42.0		13	2461	102
3249	1				64						41.0		21	2242	93
3250	1				62						45.0		9	2480	103
3251	1				59						44.0		11	2467	102
3252	1				63						41.0		1	2689	111
3253	1				64						40.0		8	2423	103
STATION AVERAGE 2437 KG PER HECTARE; LSD(.05) = 228 KG/HA. ; F = 2.7295															

FARGO					NORTH DAKOTA (EARLY)					SEEDED 5/ 1 HARVESTED 0.0					SQUARE METERS				
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D G	W I T	W I T	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD			% CHECKS			
		FIRST BLOOM	FULL BLOOM	MATURITY									RANK	KG PER HA					
389	45				64						36.0		14	1082	98				
2522	19				55						37.0		18	1015	92				
2776	14				61						39.0		17	1022	93				
2814	12				70						39.0		7	1283	117				
3101	3				61						40.0		2	1398	127				
3107	3				66						39.0		6	1304	118				
3108	3				64						40.0		11	1162	106				
3131	2				56						39.0		20	965	88				
3133	2				57						40.0		13	1100	100				
3135	2				62						40.0		10	1195	109				
3136	2				61						39.0		9	1199	109				
3137	2				64						39.0		19	995	90				
3243	1				57						41.0		16	1028	93				
3244	1				56						40.0		21	957	87				
3245	1				57						41.0		22	886	81				
3246	1				67						39.0		3	1376	125				
3247	1				70						39.0		1	1551	141				
3248	1				65						41.0		5	1336	121				
3249	1				68						40.0		8	1240	113				
3250	1				60						43.0		15	1057	96				
3251	1				64						44.0		23	509	46				
3252	1				66						40.0		4	1337	121				
3253	1				59						38.0		12	1139	103				
STATION AVERAGE 1136 KG PER HECTARE; LSD(.05) = 217 KG/HA. ; F = 5.4																			

FARGO					NORTH DAKOTA (LATE)					SEEDED 6/ 1 HARVESTED 0.0					SQUARE METERS				
C I NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D G	W I T	W I T	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD			% CHECKS			
		FIRST BLOOM	FULL BLOOM	MATURITY									RANK	KG PER HA	%				
389	44				78						38.0		20	997	91				
2522	18				75						39.0		19	1036	95				
2776	13				74						39.0		3	1442	132				
2814	11				82						39.0		21	909	83				
3101	3				76						40.0		17	1102	101				
3107	3				79						37.0		14	1208	110				
3108	3				77						38.0		18	1039	95				
3131	2				69						39.0		5	1407	128				
3133	2				73						38.0		1	1462	133				
3135	2				79						39.0		2	1460	133				
3136	2				74						39.0		5	1407	128				
3137	2				75						39.0		15	1190	109				
3243	1				80						41.0		16	1117	102				
3244	1				71						40.0		13	1209	110				
3245	1				74						40.0		12	1226	112				
3246	1				88						38.0		4	1423	130				
3247	1				84						38.0		8	1316	120				
3248	1				79						39.0		22	890	81				
3249	1				80						39.0		7	1394	127				
3250	1				73						42.0		11	1230	112				
3251	1				80						41.0		23	402	37				
3252	1				82						39.0		10	1251	114				
3253	1				72						38.0		9	1271	116				
STATION AVERAGE 1191 KG PER HECTARE; LSD(.05) = 387 KG/HA. ; F = 4.7																			

TABLE 3. YIELD AND OTHER DATA FOR FLAX VARIETIES AND SELECTIONS GROWN IN REGIONAL TRIALS IN 1986 AT DIFFERENT LOCATIONS--(CONTINUED)

MINUT, NORTH DAKOTA (EARLY)										SEED 6/ 2 HARVESTED 0.0				SQUARE METERS		
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D G	W I L	W I L	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD			% CHECKS
		FIRST BLOOM	FULL BLOOM	MATURITY									RANK	PER HA	KG	
389	20				49				67		39.0		7	1393	111	
2522	16				50				66		40.0		21	1096	88	
2776	14				42				67		40.0		20	1125	90	
2814	10				47				67		42.0		7	1393	111	
3101	3				50				66		41.0		15	1279	102	
3107	3				49				66		41.0		1	1559	125	
3108	3				51				67		41.0		10	1370	109	
3131	2				43				66		41.0		18	1188	95	
3133	2				46				66		40.0		9	1388	111	
3135	2				50				66		41.0		12	1313	105	
3136	2				45				66		41.0		11	1365	109	
3137	2				42				68		41.0		14	1290	103	
3243	1				43				66		43.0		4	1427	114	
3244	1				43				66		44.0		2	1467	117	
3245	1				42				66		43.0		17	1193	95	
3246	1				48				67		40.0		22	1073	86	
3247	1				51				67		41.0		3	1456	116	
3248	1				45				67		42.0		4	1427	114	
3249	1				45				67		41.0		13	1308	104	
3250	1				40				64		44.0		16	1216	97	
3251	1				44				65		45.0		23	1062	85	
3252	1				51				64		40.0		19	1136	91	
3253	1				50				67		39.0		4	1427	114	

STATION AVERAGE 1302 KG PER HECTARE; LSD(.05) = 215 KG/HA. ; F = 3.966

CARRINGTON, NORTH DAKOTA (EARLY)										SEED 5/ 1 HARVESTED 0.0				SQUARE METERS		
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D G	W I L	W I L	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD			% CHECKS
		FIRST BLOOM	FULL BLOOM	MATURITY									RANK	PER HA	KG	
389	20				78						37.0		20	957	91	
2522	16				75						40.0		19	1036	95	
2776	15				74						40.0		3	1442	132	
2814	9				82						41.0		21	909	83	
3101	3				76						41.0		17	1102	101	
3107	3				79						40.0		14	1208	110	
3108	3				77						42.0		18	1039	95	
3131	2				69						41.0		5	1407	128	
3133	2				73						38.0		1	1462	133	
3135	2				79						39.0		2	1460	133	
3136	2				74						40.0		5	1407	128	
3137	2				75						39.0		15	1190	109	
3243	1				80						43.0		16	1117	102	
3244	1				71						38.0		13	1209	110	
3245	1				74						38.0		12	1226	112	
3246	1				88						40.0		4	1423	130	
3247	1				84						39.0		8	1316	120	
3248	1				79						42.0		22	890	81	
3249	1				80						41.0		7	1394	127	
3250	1				73						44.0		11	1230	112	
3251	1				80						39.0		23	402	37	
3252	1				82						40.0		10	1251	114	
3253	1				72						40.0		9	1271	116	

STATION AVERAGE 1191 KG PER HECTARE; LSD(.05) = 375 KG/HA. ; F = 2.4

LANGDON, NORTH DAKOTA (EARLY)										SEED 6/ 1 HARVESTED 0.0				SQUARE METERS		
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D G	W I L	W I L	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD			% CHECKS
		FIRST BLOOM	FULL BLOOM	MATURITY									RANK	PER HA	KG	
389	1				63				64				22	691	60	
2522	1				57				66				18	1016	88	
2776	1				59				70				2	1656	144	
2814	1				69				67				11	1245	108	
3101	1				67				68				1	1679	146	
3107	1				62				67				16	1134	98	
3108	1				65				61				23	474	41	
3131	1				60				68				5	1490	129	
3133	1				63				68				15	1153	100	
3135	1				63				67				12	1233	107	
3136	1				61				67				7	1388	120	
3137	1				64				70				3	1593	138	
3243	1				60				67				10	1336	116	
3244	1				58				64				19	931	81	
3245	1				58				66				20	902	78	
3246	1				66				69				4	1519	132	
3247	1				75				67				14	1171	102	
3248	1				64				67				12	1233	107	
3249	1				67				67				17	1028	89	
3250	1				61				67				6	1427	124	
3251	1				66				63				21	811	70	
3252	1				67				68				9	1359	118	
3253	1				63				71				8	1365	118	

STATION AVERAGE 1210 KG PER HECTARE; LSD(.05) = 308 KG/HA. ; F = 9.107

TABLE 3. YIELD AND OTHER DATA FOR FLAX VARIETIES AND SELECTIONS GROWN IN REGIONAL TRIALS IN 1986 AT DIFFERENT LOCATIONS--(CONTINUED)

MORDEN		MANITOBA		(EARLY)		SEEDING 5/23		HARVESTED 0.0		SQUARE METERS				
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D G	W L T	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD		
		FIRST BLOOM	FULL BLOOM	MATURITY								RANK	KG PER HA	CHECKS
389	41				73	3	T			38.0		20	973	87
2522	16				63	4				39.0		3	1450	130
2776	14				64	4				40.0		7	1300	116
2814	11				78	4				38.0		23	741	66
3101	3				67	2				39.0		2	1472	132
3107	3				71	5				37.0		17	1066	95
3108	3				65	2				38.0		18	1028	92
3131	2				67	5				40.0		1	1547	138
3133	2				70	4				39.0		8	1290	115
3135	2				67	3				39.0		4	1438	129
3136	2				66	4				39.0		5	1333	119
3137	2				73	3				37.0		12	1217	109
3243	1				67	3				41.0		6	1314	118
3244	1				64	3				41.0		16	1093	98
3245	1				64	2				39.0		19	1027	92
3246	1				79	4				38.0		13	1198	107
3247	1				80	3				38.0		22	756	68
3248	1				73	4				39.0		14	1162	104
3249	1				73	5				38.0		15	1102	99
3250	1				62	4				42.0		10	1268	113
3251	1				64	4				44.0		11	1222	109
3252	1				80	3				38.0		21	954	85
3253	1				69	5				39.0		9	1278	119
STATION AVERAGE 1185 KG PER HECTARE LSD(.05) = 207 KG/HA. ; F = 8.3432														

STATION AVERAGE 1185 KG PER HECTARE; LSD(.05) = 207 KG/HA. ; F = 8.3432

PORTAGE		MANITOBA		(EARLY)		SEEDING 5/23		HARVESTED 0.0		SQUARE METERS					
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D	W L	N L	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD		CHECKS
		FIRST BLOOM	FULL BLOOM	MATURITY									RANK	KG PER HA	
389	11				71	3				39.0			17	1338	92
2522	11				66	4				39.0			3	1680	115
2776	11				63	2				40.0			16	1362	94
2814	11				82	2				41.0			13	1441	99
3101	3				66	2				40.0			1	1767	121
3107	3				81	2				41.0			10	1540	106
3108	3				72	6				41.0			20	987	68
3131	2				62	2				41.0			2	1750	120
3133	2				68	2				40.0			14	1395	96
3135	2				75	3				40.0			11	1515	104
3136	2				70	2				40.0			8	1613	111
3137	2				74	3				40.0			12	1465	101
3243	1				69	2				40.0			23	743	51
3244	1				65	2				42.0			22	793	54
3245	1				62	2				41.0			21	970	67
3246	1				80	1				39.0			6	1657	114
3247	1				87	1				39.0			15	1375	94
3248	1				80	2				41.0			9	1592	109
3249	1				81	2				41.0			4	1674	115
3250	1				67	2				43.0			18	1290	89
3251	1				71	2				45.0			19	1179	81
3252	1				83	1				40.0			7	1646	113
3253	1				74	2				39.0			5	1673	115
STATION AVERAGE 1411 KG PER HECTARE; LSD(.05) = 254 KG/HA. : F = 10.9421															

STATION AVERAGE 1411 KG PER HECTARE; LSD(.05) = 254 KG/HA. ; F = 10.9421

PORTAGE		MANITOBA		(LATE )		SEEDING 6/26		HARVESTED 0.0		SQUARE METERS					
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D	W L	N L	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD		CHECKS
		FIRST BLOOM	FULL BLOOM	MATURITY									RANK	KG PER HA	
389	9				72	3				40.0			17	1894	92
2522	9				63	2				40.0			10	2094	101
2776	9				63	2				40.0			16	1924	93
2814	9				86	2				42.0			3	2361	114
3101	3				64	2				41.0			5	2253	109
3107	3				80	3				41.0			2	2393	116
3108	3				73	5				41.0			21	1497	72
3131	2				65	2				42.0			8	2186	106
3133	2				65	2				41.0			14	2041	99
3135	2				75	3				40.0			15	1996	97
3136	2				62	2				40.0			12	2072	100
3137	2				74	3				40.0			11	2089	101
3243	1				67	2				41.0			23	1108	54
3244	1				67	2				41.0			22	1217	59
3245	1				65	2				42.0			19	1535	74
3246	1				86	2				40.0			7	2201	106
3247	1				86	2				40.0			9	2126	103
3248	1				82	3				42.0			4	2321	112
3249	1				85	3				41.0			6	2223	107
3250	1				65	2				44.0			18	1731	84
3251	1				79	3				45.0			20	1530	74
3252	1				83	2				42.0			1	2436	118
3253	1				73	2				40.0			13	2043	92
STATION AVERAGE 1969 KG PER HECTARE: LSD(.05) = 317 KG/HA. ; F = 10.7121															

STATION AVERAGE 1969 KG PER HECTARE; LSD(.05) = 317 KG/HA. ; F = 10.7121



TABLE 3. YIELD AND OTHER DATA FOR FLAX VARIETIES AND SELECTIONS GROWN IN REGIONAL TRIALS IN 1986 AT DIFFERENT LOCATIONS--(CONTINUED)

WINNIPEG, MANITOBA (EARLY)										SEED 5/14 HARVESTED 0.0				SQUARE METERS		
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D	W I	W I	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD KG PER HA	RANK	PER HA	CHECKS
		FIRST	FULL	MATURITY												
389	17				63				70	7.0			22	1938	90	
2522	15				58				70	6.0			5	2339	105	
2776	12				54				70	6.0			11	2222	100	
2814	9				62		1		71	6.0			6	2315	104	
3101	3				61				70	6.0			8	2378	107	
3107	3				62		5		70	6.0			18	2154	97	
3108	3				61		4		69	6.0			23	1738	78	
3131	2				55				69	6.0			7	2305	104	
3133	2				59				70	6.0			16	2188	99	
3135	2				62		1		70	5.0			20	2131	96	
3136	2				60				70	5.0			15	2196	99	
3137	2				55				71	6.0			8	2277	103	
3243	1				56				69	6.0			3	2380	107	
3244	1				55		1		69	6.0			12	2221	100	
3245	1				57		2		69	6.0			19	2141	97	
3246	1				63				70	6.0			10	2240	101	
3247	1				68		1		70	5.0			13	2214	100	
3248	1				59		2		70	6.0			14	2201	99	
3249	1				62		3		71	5.0			17	2165	98	
3250	1				56				68	6.0			1	2419	109	
3251	1				54		3		67	7.0			21	2082	94	
3252	1				62		1		69	5.0			2	2389	108	
3253	1				64				71	6.0			9	2272	102	
STATION AVERAGE 2216 KG PER HECTARE; LSD(.05) = 226 KG/HA. ; F = 3.3987																

SASKATOON (EARLY)										SEED 5/21 HARVESTED 0.0				SQUARE METERS		
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D	W I	W I	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD KG PER HA	RANK	PER HA	CHECKS
		FIRST	FULL	MATURITY												
389	16				59				6.0				16	1860	100	
2522	16				50				5.0				19	1748	94	
2776	13				45				6.0				18	1764	95	
2814	12				69				5.0				6	2068	111	
3101	3				50				5.0				15	1881	101	
3107	3				64				6.0				3	2132	115	
3108	3				51				6.0				2	2148	115	
3131	2				52				5.0				20	1699	91	
3133	2				59				5.0				9	2004	108	
3135	2				63				5.0				14	1902	102	
3136	2				54				5.0				17	1846	99	
3137	2				56				5.0				8	2020	109	
3243	1				50				6.0				11	1970	106	
3244	1				51				6.0				21	1680	90	
3245	1				53				6.0				12	1946	105	
3246	1				54				6.0				13	1929	104	
3247	1				66				5.0				4	2120	114	
3248	1				60				6.0				1	2243	121	
3249	1				55				5.0				5	2103	113	
3250	1				64				6.0				22	1577	85	
3251	1				54				6.0				23	1419	76	
3252	1				66				5.0				7	2047	110	
3253	1				52				5.0				10	1921	107	
STATION AVERAGE 1918 KG PER HECTARE; LSD(.05) = 293 KG/HA. ; F = 3.7257																

WILLISTON, NORTH DAKOTA (EARLY)										SEED 5/12 HARVESTED 0.0				SQUARE METERS		
CI NUMBER	YEARS GROWN	DAYS FROM SOWING TO			HEIGHT CM	L D	W I	W I	TEST WT G/L	1000 SEED WT GMS	OIL %	IODINE VALUE	YIELD KG PER HA	RANK	PER HA	CHECKS
		FIRST	FULL	MATURITY												
389	2				46				70				21	1248	94	
2522	2				45				71				20	1278	96	
2776	2				42				70				18	1314	99	
2814	2				49				70				5	1490	112	
3101	2				54				71				14	1356	102	
3107	2				50				70				1	1563	117	
3108	2				48				69				12	1384	104	
3131	2				43				69				15	1350	101	
3133	2				44				70				17	1315	99	
3135	2				47				71				13	1360	102	
3136	2				46				70				11	1389	104	
3137	2				44				71				7	1460	110	
3243	1				46				70				4	1494	112	
3244	1				47				69				2	1557	117	
3245	1				44				70				10	1401	105	
3246	1				51				70				6	1469	110	
3247	1				53				69				8	1449	109	
3248	1				47				70				3	1500	113	
3249	1				48				70				16	1345	101	
3250	1				41				68				22	1231	92	
3251	1				41				68				23	960	72	
3252	1				51				69				19	1305	98	
3253	1				46				71				9	1406	106	
STATION AVERAGE 1375 KG PER HECTARE; LSD(.05) = 244 KG/HA. ; F = 3.4																

TABLE 4. SUMMARY OF SEED YIELD IN KILOGRAMS PER HECTARE FOR FLAX LINES GROWN IN COOPERATIVE REGIONAL NURSERIES IN 1986.

CI NO	OVERALL RANK			L A B E R T O N	C R O O K S T O N	B R O O K I N G S	W A T E R T O N	F A R R O	M I N O T	C A R R I N G T O N	L A N G D O N	M O R D E N	P O R T A G E	J I N I P E G	S T O N	I L L I S T O N		
	EARLY	LATE	TOTAL	EARLY	EARLY	EARLY	EARLY	EARLY	LATE	EARLY	EARLY	EARLY	EARLY	EARLY	LATE	EARLY	EARLY	EARLY
389	22	18	21	1406	1512	1720	2175	1082	997	1393	997	691	973	1338	1854	1998	1860	1248
2522	18	16	17	1744	1543	1743	2522	1015	1036	1096	1036	1016	1358	1680	2094	2339	1748	1278
2776	14	10	14	1735	1648	1756	2508	1022	1442	1125	1442	1656	1300	1362	1924	2222	1764	1314
2814	13	14	15	1879	1585	2078	2462	1283	909	1393	909	1245	741	1441	2361	2315	2068	1490
3101	1	11	1	1960	1887	1874	2448	1398	1102	1279	1102	1679	1472	1767	2253	2378	1881	1356
3107	8	4	6	1702	1733	1886	2340	1304	1208	1559	1208	1131	1066	1540	2393	2154	2132	1563
3108	21	20	22	1420	1878	1748	2098	1162	1039	1370	1039	474	1028	987	1497	1738	2148	1384
3131	4	5	3	2037	1691	1679	2564	965	1407	1188	1407	1490	1547	1750	2186	2305	1699	1350
3133	10	6	10	1906	1816	1688	2477	1100	1462	1388	1462	1153	1290	1395	2041	2188	2004	1315
3135	11	8	12	1771	1702	1694	2399	1195	1460	1313	1460	1233	1438	1515	1996	2131	1902	1360
3136	5	7	4	1768	1827	1715	2574	1199	1407	1365	1407	1388	1333	1613	2072	2196	1846	1389
3137	6	13	7	1788	1787	2093	2438	995	1190	1290	1190	1593	1217	1465	2069	2277	2020	1460
3243	17	22	18	1823	1628	1980	2577	1028	1117	1427	1117	1336	1314	743	1108	2380	1476	1494
3244	19	21	20	1493	1682	1864	2508	957	1209	1467	1209	931	1093	793	1217	2221	1680	1557
3245	20	19	19	1429	1693	2096	2416	886	1226	1193	1226	902	1027	970	1535	2141	1946	1401
3246	9	2	8	1657	1543	1764	2336	1376	1423	1073	1423	1519	1198	1657	2201	2240	1929	1469
3247	15	9	13	1626	1686	1753	2362	1551	1316	1456	1316	1171	756	1375	2126	2244	2126	1449
3248	3	15	5	1700	1885	2116	2461	1336	890	1427	890	1233	1162	1592	2321	2201	2243	1500
3249	12	3	11	1770	1762	1920	2242	1240	1394	1308	1394	1028	1102	1674	2223	2165	2103	1345
3250	15	17	16	1777	1549	1920	2480	1057	1230	1216	1230	1427	1268	1290	1731	2419	1577	1231
3251	23	23	23	1104	1647	1843	2467	509	402	1062	402	811	1222	1179	1530	2082	1415	960
3252	2	1	2	1874	1742	2262	2689	1337	1251	1136	1251	1353	954	1646	2436	2389	2047	1305
3253	7	12	9	1673	1684	1754	2493	1139	1271	1427	1271	1365	1278	1673	2043	2272	1991	1406
0																		
AVERAGE				1697	1730	1858	2436	1136	1190	1302	1190	1210	1184	1411	1968	2216	1918	1374

TABLE 5. SUMMARY OF SEED YIELD IN PERCENT OF THE MEAN OF THE 4 CHECK VARIETIES DURING 1986.

L A B E R T O N C R O O K S T O N B R O O K I N G S W A T E R T O N F A R G O M I N O T C A R R I N G T O N L A N G D O N M O R D E N P O R T A G E J I N I P E G S I T C N I L L I S T C N																		
CI NO	OVERALL AVERAGE			EARLY	EARLY	EARLY	EARLY	EARLY	LATE	EARLY	EARLY	EARLY	EARLY	EARLY	LATE	EARLY	EARLY	EARLY
	EARLY	LATE	TOTAL															
389	92	91	92	83	93	97	90	98	91	111	91	60	87	92	92	90	100	94
2522	101	99	100	103	107	87	104	92	95	88	95	88	130	115	101	105	94	96
2776	104	106	104	103	102	99	104	93	132	90	132	144	116	94	93	100	95	99
2814	104	103	104	111	98	117	102	117	83	111	83	108	66	99	114	104	111	112
3101	112	106	111	116	117	106	101	127	101	102	101	146	132	121	109	107	101	102
3107	106	114	107	101	107	106	97	118	110	125	110	98	95	106	116	97	115	117
3108	92	80	90	84	116	99	87	106	95	109	95	41	92	68	72	78	115	104
3131	108	114	109	120	104	95	106	88	128	95	128	129	138	120	106	104	91	101
3133	105	111	106	113	112	95	102	100	133	111	133	100	115	96	99	99	108	99
3135	105	109	106	105	105	95	99	109	133	105	133	107	129	104	97	96	102	102
3136	108	110	108	105	113	97	107	109	128	109	128	120	119	111	100	99	99	104
3137	108	104	107	106	110	118	101	90	109	103	109	138	109	101	101	103	109	110
3243	104	70	99	108	101	112	107	93	102	114	102	116	118	51	54	107	106	112
3244	97	77	94	88	104	105	104	87	110	117	110	81	78	54	59	100	90	117
3245	96	87	95	85	105	118	100	81	112	95	112	78	92	67	74	97	105	105
3246	105	115	107	98	95	99	97	125	130	86	130	132	107	114	106	101	104	110
3247	104	109	104	96	104	99	98	141	120	116	120	102	68	94	103	100	114	109
3248	108	101	107	101	116	119	102	121	81	114	81	107	104	109	112	94	121	113
3249	105	114	106	105	109	108	93	113	127	104	127	89	99	115	107	98	113	101
3250	104	94	102	105	120	108	103	96	112	97	112	124	113	89	84	109	85	92
3251	83	61	80	65	102	104	102	46	37	85	37	70	109	81	74	94	75	72
3252	109	117	110	111	108	127	111	121	114	91	114	118	85	113	118	108	110	98
3253	107	105	106	99	104	99	103	103	116	114	116	118	114	115	99	102	107	106
0																		

TABLE 6. STATE AVERAGES

CI	MINNESOTA		ALL	SOUTH DAKOTA		ALL	NORTH DAKOTA		ALL	MANITOBA		ALL	OTHERS		ALL	ALL STATIONS		
	EARLY	LATE		EARLY	LATE		EARLY	LATE		EARLY	LATE		EARLY	LATE		EARLY	LATE	ALL
OVER 1 YEAR																		
OVER 1 YEAR																		
389	1459	0	1459	1947	0	1947	1082	997	1068	1436	1894	1550	1860	0	1860	1414	1445	1418
2522	1738	0	1738	2032	0	2032	1088	1036	1079	1825	2094	1892	1748	0	1748	1554	1565	1555
2776	1691	0	1691	2132	0	2132	1311	1442	1333	1628	1924	1702	1764	0	1764	1604	1683	1614
2814	1732	0	1732	2270	0	2270	1264	909	1204	1499	2361	1714	2068	0	2068	1606	1635	1610
3101	1923	0	1923	2161	0	2161	1362	1102	1319	1872	2253	1967	1881	0	1881	1729	1677	1722
3107	1717	0	1717	2113	0	2113	1353	1208	1328	1586	2393	1788	2132	0	2132	1639	1800	1661
3108	1649	0	1649	1923	0	1923	1085	1039	1078	1251	1497	1312	2148	0	2148	1421	1268	1400
3131	1864	0	1864	2121	0	2121	1280	1407	1301	1867	2186	1947	1699	0	1699	1667	1796	1684
3133	1861	0	1861	2082	0	2082	1283	1462	1313	1624	2041	1728	2004	0	2004	1629	1751	1645
3135	1736	0	1736	2046	0	2046	1312	1460	1336	1694	1996	1770	1902	0	1902	1624	1728	1637
3136	1797	0	1797	2144	0	2144	1349	1407	1359	1714	2072	1803	1846	0	1846	1663	1739	1673
3137	1787	0	1787	2265	0	2265	1305	1190	1286	1653	2089	1762	2020	0	2020	1662	1639	1659
3243	1725	0	1725	2278	0	2278	1280	1117	1253	1479	1108	1386	1976	0	1976	1601	1112	1536
3244	1587	0	1587	2186	0	2186	1224	1209	1221	1369	1217	1331	1680	0	1680	1496	1213	1458
3245	1561	0	1561	2256	0	2256	1121	1226	1139	1379	1535	1418	1946	0	1946	1486	1380	1472
3246	1600	0	1600	2050	0	2050	1372	1423	1380	1698	2201	1824	1929	0	1929	1629	1812	1653
3247	1656	0	1656	2057	0	2057	1388	1316	1376	1448	2126	1617	2126	0	2126	1603	1721	1618
3248	1792	0	1792	2288	0	2288	1277	890	1212	1651	2321	1819	2243	0	2243	1672	1605	1663
3249	1766	0	1766	2081	0	2081	1263	1394	1284	1647	2223	1791	2103	0	2103	1619	1808	1644
3250	1863	0	1863	2200	0	2200	1232	1230	1231	1659	1731	1677	1577	0	1577	1603	1480	1586
3251	1375	0	1375	2155	0	2155	748	402	691	1494	1530	1503	1419	0	1419	1285	966	1242
3252	1808	0	1808	2475	0	2475	1277	1251	1273	1663	2436	1856	2047	0	2047	1691	1843	1711
3253	1678	0	1678	2123	0	2123	1321	1271	1313	1741	2043	1816	1991	0	1991	1648	1657	1649
0	0*	0	0*	0*	0	0*	0*	0	0*	0*	0	0*	0	0	0	0*	0*	0*
OVER 2 YEARS																		
389	1423	0	1423	1898	0	1898	1127	1114	1125	1416	1373	1405	1667	0	1667	1381	1243	1363
2522	1536	0	1536	1916	0	1916	1149	1139	1147	1605	1601	1604	1492	0	1492	1443	1370	1433
2776	1603	0	1603	2040	0	2040	1296	1409	1315	1497	1324	1454	1487	0	1487	1502	1366	1484
2814	1701	0	1701	2190	0	2190	1301	1128	1272	1470	1737	1536	1670	0	1670	1548	1432	1532
3101	1730	0	1730	2067	0	2067	1372	1346	1368	1731	1614	1702	1608	0	1608	1622	1480	1603
3107	1688	0	1688	2069	0	2069	1339	1460	1359	1608	1834	1665	1828	0	1828	1590	1647	1598
3108	1509	0	1509	1918	0	1918	1137	1274	1160	1331	1275	1317	1802	0	1802	1395	1274	1379
3131	1672	0	1672	2032	0	2032	1262	1446	1292	1654	1575	1634	1490	0	1490	1538	1510	1534
3133	1687	0	1687	2067	0	2067	1302	1500	1335	1533	1466	1516	1652	0	1652	1544	1483	1536
3135	1631	0	1631	1998	0	1998	1334	1473	1357	1557	1502	1543	1618	0	1618	1541	1487	1534
3136	1642	0	1642	2072	0	2072	1344	1461	1364	1604	1522	1584	1614	0	1614	1566	1491	1556
3137	1661	0	1661	2178	0	2178	1345	1448	1362	1562	1477	1541	1682	0	1682	1578	1462	1563
3243	1725*	0	1725*	2278*	0	2278*	1280*	1117*	1253*	1479*	1108*	1386*	1976*	0	1976*	1601*	1112*	1536*
3244	1587*	0	1587*	2186*	0	2186*	1224*	1209*	1221*	1369*	1217*	1331*	1680*	0	1680*	1496*	1213*	1458*
3245	1561*	0	1561*	2256*	0	2256*	1121*	1226*	1139*	1379*	1535*	1418*	1946*	0	1946*	1486*	1380*	1472*
3246	1600*	0	1600*	2050*	0	2050*	1372*	1423*	1380*	1698*	2201*	1824*	1929*	0	1929*	1629*	1812*	1653*
3247	1656*	0	1656*	2057*	0	2057*	1388*	1316*	1376*	1448*	2126*	1617*	2126*	0	2126*	1603*	1721*	1618*
3248	1792*	0	1792*	2288*	0	2288*	1277*	890*	1212*	1651*	2321*	1819*	2243*	0	2243*	1672*	1605*	1663*
3249	1766*	0	1766*	2081*	0	2081*	1263*	1394*	1284*	1647*	2223*	1791*	2103*	0	2103*	1619*	1808*	1644*
3250	1863*	0	1863*	2200*	0	2200*	1232*	1230*	1231*	1659*	1731*	1677*	1577*	0	1577*	1603*	1480*	1586*
3251	1375*	0	1375*	2155*	0	2155*	748*	402*	691*	1494*	1530*	1503*	1419*	0	1419*	1285*	966*	1242*
3252	1808*	0	1808*	2475*	0	2475*	1277*	1251*	1273*	1663*	2436*	1856*	2047*	0	2047*	1691*	1843*	1711*
3253	1678*	0	1678*	2123*	0	2123*	1321*	1271*	1313*	1741*	2043*	1816*	1991*	0	1991*	1648*	1657*	1649*
0	0*	0	0*	0*	0	0*	0*	0	0*	0*	0*	0*	0*	0	0*	0*	0*	0*
OVER 3 YEARS																		
389	1355	0	1355	1898	0	1898	1205	839	1141	1488	1424	1468	1249	0	1249	1363	1173	1333
2522	1438	0	1438	1916	0	1916	1172	842	1114	1629	1640	1632	1219	0	1219	1400	1298	1384
2776	1502	0	1502	2039	0	2039	1287	1021	1240	1560	1428	1519	1166	0	1166	1443	1253	1414
2814	1561	0	1561	2190	0	2190	1300	789	1210	1611	1462	1565	1284	0	1284	1497	1174	1447
3101	1586	0	1586	2066	0	2066	1396	1016	1329	1787	1592	1727	1287	0	1287	1570	1345	1535
3107	1569	0	1569	2069	0	2069	1365	1044	1308	1689	1538	1643	1403	0	1403	1544	1326	1510
3108	1465	0	1465	1918	0	1918	1196	929	1149	1511	1398	1476	1383	0	1383	1404	1197	1372



TABLE 7. SUMMARY OF AGRONOMIC DATA OTHER THAN YIELD FOR CULTIVARS OF FLAX GROWN IN THE COOPERATIVE REGIONAL TRIALS IN 1986

CULTIVAR OR C.I. NO.	DAYS FROM SOWING TO			HEIGHT (CM)	LODGING RATING (1 = BEST)	TEST WEIGHT AVG. (kg/hl)	SEED WEIGHT AVG. (g/1000)
	FIRST BLOOM	FULL BLOOM	MATURITY				
	AVG. (DAYS)	AVG. (DAYS)	AVG. (DAYS)				
BISON	47	52	102	64	4	67.6	6.7
LINOTT	44	50	98	59	3	68.4	6.0
CULBERT	45	50	104	57	1	69.3	6.4
DUFFERIN	49	57	111	67	3	68.9	6.0
3101	45	51	104	63	1	68.6	6.0
3107	49	55	106	65	4	68.4	6.1
3108	46	52	102	63	6	66.4	6.4
3131	44	49	101	59	2	67.9	5.8
3133	45	51	101	60	2	68.7	6.1
3135	46	51	107	63	3	68.8	5.7
3136	46	50	101	61	2	68.4	5.9
3137	47	53	110	61	2	69.8	6.1
3243	46	52	112	60	2	68.1	6.3
3244	45	51	110	57	3	67.1	6.2
3245	46	53	109	58	3	67.7	6.3
3246	46	55	112	67	1	69.0	6.3
3247	48	56	110	70	2	68.1	5.6
3248	46	54	110	63	3	68.4	6.3
3249	47	54	108	66	4	68.7	5.8
3250	45	51	108	61	1	67.1	6.7
3251	42	49	113	60	2	65.8	7.0
3252	49	57	111	66	2	67.7	5.9
3253	48	52	107	61	2	70.2	6.1
NO. OF TESTS	12	1	3	15	4	4	2

TABLE 8. SUMMARY OF RESISTANCE TO FUSARIUM WILT AND PASMO FOR CULTIVARS OF FLAX GROWN IN THE COOPERATIVE REGIONAL TRIALS IN 1986

CULTIVAR OR C.I. NO.	FUSARIUM WILT						PASMO		
	1986			TWO-YEAR MEAN		THREE-YEAR MEAN		1986	TWO-YEAR MEAN
	FARGO ND	ST. PAUL MN	MORDEN MAN.	FARGO ND	MORDEN MAN.	FARGO ND	MORDEN MAN.	LAMBERTON MN	LAMBERTON MN
BISON	5.0	3.0	3.3	4.5	2.2	5.2	4.2	5.7	5.4
LINOTT	7.0	6.5	4.0	8.0	3.5	7.9	6.2	5.0	4.5
CULBERT	4.7	2.5	4.3	5.4	3.7	5.9	2.8	4.0	4.0
DUFFERIN	3.7	1.5	3.8	4.9	2.9	5.4	2.0	6.0	5.5
3101	6.3	4.5	2.3	6.2	1.7	6.6		3.3	3.2
3107	2.0	2.0	4.5	3.0	2.8	2.6		7.0	7.0
3108	5.7	5.5	2.0	5.4	1.5	6.3		6.7	6.4
3131	6.0	5.5	4.8	6.5	3.4			4.0	4.0
3133	4.3	3.0	3.8	5.2	2.9			4.0	4.0
3135	5.7	4.0	3.0	6.4	2.0			5.3	4.7
3136	5.3	3.0	3.5	6.2	2.3			4.0	4.0
3137	3.0	1.5	2.8	4.0	1.9			3.7	3.9
3243	6.3	4.0	3.4					4.3	
3244	5.0	5.0	3.3					6.3	
3245	6.3	6.0	1.8					4.7	
3246	5.7	3.0	3.8					4.7	
3247	4.0	2.5	2.5					4.3	
3248	3.7	2.0	4.3					6.3	
3249	6.7	6.0	4.8					6.3	
3250	4.7	2.5	4.0					3.3	
3251	7.0	5.0	3.8					4.3	
3252	3.7	1.5	3.0					5.7	
3253	7.7	7.0	5.3					4.0	

TABLE 9. SUMMARY OF OIL PERCENTAGES FOR CULTIVARS OF FLAX GROWN IN THE COOPERATIVE REGIONAL TRIALS IN 1986, 2- AND 3-YEAR MEANS

CULTIVAR OR C.I. NO.	LAMB. MN (E)	CROOK. MN (E)	BRK. SD (E)	WAT. SD (E)	FARGO ND (E)	FARGO ND (L)	MINOT ND (E)	CAR. ND (E)	MOR. MAN. (E)	PORT. MAN. (E)	PORT. MAN. (L)	MEAN 11 LOC.	TWO- YEAR MEAN	THREE- YEAR MEAN
BISON	38.2	39.6	39.7	40.0	36.8	38.1	39.7	37.9	38.5	39.5	40.0	38.9	40.0	40.3
LINOTT	38.5	40.6	40.7	41.1	37.2	39.4	40.5	40.6	39.2	39.6	40.6	39.8	40.6	40.9
CULBERT	39.4	40.6	40.4	41.9	39.8	39.8	40.9	40.5	40.2	40.4	40.7	40.4	41.1	41.3
DUFFERIN	39.8	40.6	42.0	41.3	39.6	39.4	42.1	41.2	38.5	41.3	42.8	40.8	42.0	42.0
3101	39.6	41.8	42.1	42.6	40.1	40.1	41.9	41.1	39.0	40.6	41.7	41.0	41.7	42.1
3107	39.6	40.4	41.9	41.4	39.3	37.7	41.4	40.6	37.6	41.5	41.8	40.3	41.1	41.4
3108	39.1	41.2	41.1	40.3	40.1	38.9	41.9	42.6	38.9	41.4	41.9	40.7	41.6	42.0
3131	39.2	41.7	41.2	42.3	39.9	39.5	41.7	41.0	40.2	41.8	42.0	41.0	41.7	
3133	39.2	41.2	41.0	42.0	40.3	38.5	40.9	38.3	39.4	40.9	41.5	40.3	41.4	
3135	38.9	40.0	40.5	41.8	40.2	39.6	41.0	39.9	39.4	40.1	40.8	40.2	41.0	
3136	38.7	40.8	41.6	42.1	39.6	39.8	41.2	40.0	39.8	40.9	40.6	40.5	41.3	
3137	37.0	40.8	41.1	42.0	39.6	39.3	41.0	39.8	37.7	40.4	40.3	40.0	40.6	
3243	40.5	42.3	44.0	43.0	41.7	41.2	43.4	43.4	41.4	40.7	41.1	42.1		
3244	41.2	43.2	44.2	43.7	40.9	40.7	44.2	38.1	41.8	42.6	41.0	42.0		
3245	40.2	42.6	43.4	43.2	41.2	40.1	43.7	38.8	39.2	41.3	42.6	41.5		
3246	38.7	39.9	40.5	39.8	39.3	38.7	40.3	40.5	38.6	39.9	40.8	39.7		
3247	38.8	39.9	39.9	39.9	39.7	38.9	41.0	39.4	38.0	39.1	40.7	39.6		
3248	40.3	41.4	42.6	42.6	41.0	39.8	42.1	42.6	39.6	41.7	42.7	41.5		
3249	39.1	40.4	41.1	41.3	40.1	39.2	41.5	41.3	38.9	41.2	41.4	40.5		
3250	43.2	44.2	43.5	45.3	43.7	42.5	44.4	44.8	42.1	43.2	44.3	43.7		
3251	43.0	44.8	45.7	44.6	44.2	41.6	45.3	39.5	44.7	45.5	45.1	44.0		
3252	39.6	40.5	41.7	41.6	40.8	39.4	40.8	40.6	38.0	40.9	42.9	40.6		
3253	39.2	39.5	40.7	40.5	38.9	38.7	39.9	40.4	39.7	39.7	40.5	39.8		

TABLE 10. SUMMARY OF IODINE VALUES FOR FLAXSEED PRODUCED AT FOUR LOCATIONS IN THE 1986 REGIONAL TRIALS

CULTIVAR OR C.I. NO.	FARGO ND	MINOT ND	BROOKINGS SD	PORTAGE MAN.	MEAN
389	181	188	181	187	184
2522	188	193	187	193	190
2776	195	200	195	201	198
2814	192	195	185	193	191
3101	190	192	188	186	189
3107	192	192	187	192	191
3108	192	194	184	196	192
3131	192	197	185	197	193
3133	193	192	184	196	191
3135	194	194	188	199	194
3136	195	193	187	198	193
3137	191	192	183	194	190
3243	188	186	183	190	187
3244	187	187	185	187	187
3245	185	188	180	186	185
3246	192	191	186	194	191
3247	190	189	179	189	187
3248	190	188	184	194	189
3249	187	190	186	194	189
3250	179	183	178	185	181
3251	167	173	165	172	169
3252	195	191	186	196	192
3253	195	195	193	201	196





